

REMARKS

The Applicants have carefully considered the Official Action dated December 31, 2002. The Applicants have amended independent claims 1 and 5. No new matter has been added with the amendments to independent claims 1 and 5. A reconsideration is requested of claims 1-8.

Pending Claims

Claims 1-8 are currently pending.

Rejection Under 35 U.S.C. §112, First Paragraph

The Official Action rejected claims 1-4 under 35 U.S.C. §112, first paragraph, as containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. More specifically, the Official Action alleges that the specification, as originally filed, failed to convey a first part and a second part of a homogenization process as now claimed. The Applicants respectfully traverse the rejection. The Applicants submit that the original specification indicates on page 6 lines 3-6 that the invention relates to a method of homogenization which combines conventional homogenization with counter directed flows. In addition, reference may be made to page 5 lines 10-20 of the originally filed specification which discloses a first part of the homogenization (lines 10-14) and a second part of the homogenization process (lines 15-20). Therefore, the Applicants believe that the specification, as originally filed, describes

the invention as claimed in claims 1-4 in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. Therefore, the Applicants respectfully request that the rejection be withdrawn.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Official Action also rejected claims 1-4 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Claims 1-4 have been amended such that the claims distinctly claim both a first part of a homogenization and a second part of the homogenization. Therefore, the Applicants respectfully submit that, as amended, claims 1-4 overcome the rejection under 35 U.S.C. §112, second paragraph, and respectfully request that the rejection be withdrawn.

Rejection Under 35 U.S.C. §102(b)

The Official Action also rejected claims 1-5 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 1,496,858 to *Knollenberg* (the '858 patent). The '858 patent discloses a method of mixing liquids which employs a first axial channel a disposed within a metal block. The first axial channel a communicates with radial conduits d and c which are in fluid communication with narrow radial channels e and f. The narrow radial channels e and f communicate with a second central channel g. During operation of the device disclosed in the '858 patent, liquid enters into the first axial channel a and travels

through the radial conduits c and d. After traveling through the radial conduits c and d, the liquid travels into the narrow radial channels e and f. Upon exiting the narrow radial channels e and f, the liquid is homogenized in the second central channel g.

As amended, independent claim 1 claims a method of homogenization of a pressurized liqueform emulsion comprising a first part and a second part. During the first part of the homogenization, liquid is homogenized when the liquid passes out from homogenization gaps and into a restricted space. The liquid is subjected to a second part of the homogenization in the restricted space when liquid meets each other from one or more of the homogenization gaps. Moreover, independent claim 1 has been amended to claim that at least two concentrically placed homogenization gaps are adjacent a restricted space.

Claim 5 has been amended to claim a method of homogenization comprising passing a liquid through at least two concentrically placed homogenization gaps during the first part of the homogenization. In addition, independent claim 5 has been amended to claim dispensing the liquid from the two concentrically placed homogenization gaps and into a restricted space at a high speed thereby subjecting the liquid to a second part of the homogenization in the restricted space. Moreover, independent claim 5 has been amended to claim that at least two concentrically placed homogenization gaps are adjacent the restricted space.

The Applicants respectfully submit that the '858 patent does not disclose each and every element claimed in amended independent claims 1 and 5 as required under 35 U.S.C. §102(b). Therefore, the Applicants respectfully submit that claims 1 and 5 are not

anticipated by the '858 patent under 35 U.S.C. §102(b). More specifically, claims 1 and 5 claim that a first part of the homogenization occurs when the liquid passes through at least two concentrically placed homogenization gaps. In addition, independent claims 1 and 5 have been amended to claim that a second part of the homogenization occurs in a restricted space. The Applicants respectfully submit that the '858 patent does not disclose homogenizing the liquid by passing a liquid through at least two concentrically placed homogenization gaps. Therefore, the '858 patent does not disclose each and every element claimed in independent claims 1 and 5. As such, the Applicants respectfully submit that the '858 patent does not anticipate claims 1 and 5 under 35 U.S.C. §102(b) and respectfully request that the rejection be withdrawn.

The Official Action also rejected claims 1-8 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,882,025 to *Loo* (the '025 patent). The '025 patent discloses a homogenizing valve 10 having axial inlet ports 30 and 31. The homogenizing valve 10 also includes sharp ridges 33 and 34 disposed on a valve seat element 26. In addition, the homogenizing valve 10 includes an annular groove 35 formed between the axial inlet ports 31 and the sharp ridges 33 and 34. During operation of the homogenizing valve 10, liquid enters the axial inlet ports 30 and 31 and homogenizes as the liquid travels over the sharp ridges 33 and 34. Upon homogenization, the liquid exits through exit ports 36.

The Applicants respectfully submit that the '025 patent does not disclose each and every element claimed in claims 1-8 as required under 35 U.S.C. §102(b). Therefore, the Applicants believe that claims 1-8 are not anticipated by the '025 patent under 35 U.S.C.

§102(b). As previously discussed, as amended, both independent claims 1 and 5 claim subjecting a liquid to a first part of a homogenization and a second part of a homogenization. More specifically, independent claims 1 and 5 claim that the first part of the homogenization occurs as liquid passes through two concentrically placed homogenization gaps. In addition, independent claims 1 and 5 claim that the liquid is subjected to a second part of the homogenization in the restricted space. The Applicants believe that the '025 patent does not disclose subjecting a liquid to a first part of a homogenization and a second part a homogenization. Instead, the '025 patent discloses homogenizing a liquid as it passes over sharp ridges 33 and 34. The Applicants respectfully submit that the '025 patent does not disclose the second part of a homogenization occurring within the restricted space. As such, the Applicants submit that the '025 patent does not disclose all the elements claimed in independent claims 1 and 5 under 35 U.S.C. §102(b). As such, the Applicants believe that the '025 patent does not anticipate independent claims 1 and 5 under 35 U.S.C. §102(b) and respectfully requests that the rejection be withdrawn. Dependant claims 2-4, which depend from independent claim 1, are also patentable for at least the same reasons as discussed above with regard to claim 1 and for the additional features they recite. Likewise, dependent claims 6-8 which depend from independent claim 5, are also patentable for the reasons previously mentioned with regard to claim 5 and for the additional features claims 6-8 recite.


CONCLUSION

Further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, the undersigned requests that he be contacted at the number indicated below so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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Attachment to Amendment dated April 28, 2003

Mark-up of Claims 1 and 5-8

1. (Twice Amended) A method of homogenization of a pressurised liqueform emulsion[, in which the] comprising causing a liquid [is caused] to pass at least two concentrically placed homogenization gaps thereby subjecting the liquid to a first part of the homogenization, wherein the liquid, when passing out from one of the homogenization gaps at high speed and [in] into a restricted space, meets the liquid from one or more of the other homogenization gaps, whereby the liquid is subjected to a second part of the homogenization in the restricted space, wherein the at least two concentrically placed homogenization gaps are adjacent the restricted space.

5. (Amended) A method of homogenization of a pressurized liqueform emulsion, comprising the steps of:

passing liquid through at least two concentrically placed homogenization gaps thereby subjected the liquid to a first part of the homogenization; and

dispensing the liquid from the at least two concentrically placed homogenization gaps into a restricted space and at a high speed whereby the liquid is subjected to a second part of the homogenization in the restricted space, wherein the at least two concentrically placed homogenization gaps are adjacent the restricted space.

Attachment to Amendment dated April 28, 2003

6. (Amended) The method as claimed in Claim [1] 5, wherein the at least two homogenization gaps are created in the space between two surfaces on a valve seat, and two narrow surfaces on a valve cone.

7. (Amended) The method as claimed in Claim [2] 6, wherein the liquid is led into the at least two homogenization gaps through a central throughflow channel and a concentric throughflow channel which are provided in the valve seat.

8. (Amended) The method as claimed in Claim [2] 6, wherein the liquid departs from the homogenization gaps via a throughflow channel provided in the valve cone.